

REMARKS

In this paper, claims 11-21 have been added. After entry of the above amendment, claims 1-21 are pending.

Claims 1-3 and 5-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schwaller (US 5,247,430) in view of Mohan (US 5,572,415). This basis for rejection is respectfully traversed.

It is respectfully submitted that Mohan is nonanalogous art. Mohan is not directed to the bicycle field. Furthermore, Mohan is directed to the problem of designing electrically powered equipment that can accommodate the wide variety of mains AC voltages that occur throughout the world, and particularly to accommodate the two main voltage groups: low voltage ranges (88-132 Vrms) and high voltage ranges (176-264 Vrms). Schwaller is not at all concerned with mains AC voltages that occur throughout the world because the bicycle operates with a bicycle dynamo and not with AC mains.

Furthermore, the mere fact that the prior art could be modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. In re Laskowski 10 USPQ.2d 1397 (Fed.Cir. 1989). More importantly, there must be some logical reason apparent from positive, concrete evidence of record which justifies a suggestion to modify a prior art structure. See In re Regel, 188 USPQ 136, 139 (CCPA 1975). The motivation to combine must be clear and particular, and it must be supported by actual evidence. Teleflex, Inc. v. Ficosa North America Corp., 63 USPQ.2d 1374, 1387 (Fed.Cir. 2002). Also, a rejection based on Section 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, the examiner has the initial duty of supplying the factual basis for the rejection he advances. He or she may not, because he or she doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. Ex parte Haymond, 41 USPQ2d 1217 (BdPatApp&Int 1996).

The basic assertion that the motivation to combine the teachings of the references comes from a desire to create “a more effective charging system” does not meet this test. In fact, a main objective of Schwaller is to reduce the pedaling resistance that occurs when the dynamo provides power to the load. That is why the Schwaller system changes to a pulsed mode of operation to charge the batteries and illuminate the lamps when the voltage from the dynamo rises above a desired voltage U_A as shown in Fig. 3 and described at column 3, lines 40-66 of the Schwaller patent. The Mohan system does not pulse the current to the load in this manner, so providing the Mohan system in the Schwaller device would destroy the objective of the Schwaller patent to relieve pedaling resistance at high speeds.

New claims 11-21 are considered patentable as a minimum for the same reasons. Furthermore, claim 11 recites the full wave charging element receiving and storing charge from the first half-wave charging element and from the second half-wave charging element in addition to charge received from the rectifying circuit. The half wave charging elements in Mohan form part of any full wave charging element, so any purported full wave charging element does not receive and store charge from half wave charging elements in addition to charge received from the rectifying circuit.

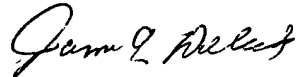
Claims 4-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schwaller in view of Mohan and Hanada (US 6,429,623). This basis for rejection is respectfully traversed for the same reasons noted above.

Accordingly, it is believed that the rejections under 35 U.S.C. §103 have been overcome by the foregoing amendment and remarks, and it is submitted that the claims are in condition for allowance. Reconsideration of this application as amended is respectfully requested. Allowance of all claims is earnestly solicited.

SATOSHI KITAMURA
Application No.: 10/616,252
Page 7

PATENT

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "James A. Deland".

James A. Deland
Reg. No. 31,242

DELAND LAW OFFICE
P.O. Box 69
Klamath River, California 96050
(530) 465-2430